



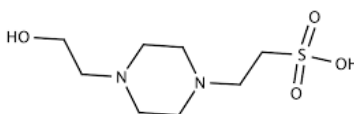
## Certificate of Analysis.

### HEPES Buffer, GC Reference Standard AnStan<sup>®</sup>.

|                   |  |
|-------------------|--|
| Product Code:     | <b>BS14191.</b>  |
| Description:      | <b>HEPES Buffer, GC Reference Standard AnStan<sup>®</sup>.</b> |
| Chemical Name:    | <b>4-(2-Hydroxyethyl) piperazine-1-ethane-sulfonic acid.</b>   |
| Pack:             | <b>5 gm.</b>   |
| CAS No.:          | <b>7365-45-9.</b>  |
| Mol. Weight:      | <b>238.31 g/mol.</b>   |
| Mol. Formula:     | <b>C<sub>8</sub>H<sub>18</sub>N<sub>2</sub>O<sub>4</sub>S.</b> |
| MDL Number:       | <b>MFCD00006158.</b>   |
| Melting point:    | <b>238 °C.</b>   |
| Boiling point:    | <b>408 °C.</b>   |
| Density:          | <b>1.07 g/ml.</b>  |
| Solubility:       | <b>Soluble in water.</b>                                       |
| Storage:          | <b>Store at ambient temperature.</b>                           |
| LOT NO.:          | <b>Sample.</b>   |
| Manufacture Date: | <b>Lot specific.</b>   |
| Expiry Date:      | <b>5 years.</b>  |

| Test                    | Specification              | Measured Values      |
|-------------------------|----------------------------|----------------------|
| Appearance:             | White powder.              | <b>Lot specific.</b> |
| Identification by NMR:  | Confirms to the structure. | <b>Lot specific.</b> |
| Identification by MASS: | Confirms to the structure. | <b>Lot specific.</b> |
| Identification by IR:   | Confirms to the structure. | <b>Lot specific.</b> |
| Purity by GC:           | >99.5%.                    | <b>Lot specific.</b> |

Please Note: - This material is only for laboratory purpose and not for human consumption. This is a computer generated COA, no stamp or signature is required.




**Dr. K. Deepti.**  
**Technical Head.**

